

WHAT IS CLAIMED IS:

1. A surgical device for severing tissue, the surgical device comprising:
 - 5 a first shaft having a first internal lumen and a first slot disposed at a distal end;
 - 10 a clamp slidably disposed in the first slot between open and closed positions to capture tissue in the first slot, the clamp having a clamping surface disposed at a distal end;
 - 15 at least one electrode for applying RF energy to the tissue captured in the first slot;
 - 20 a cutting blade slidably disposed in the first slot between open and closed positions, the cutting blade having a cutting edge to sever the tissue;
 - 25 first actuation means for actuating the clamp between the open and closed positions; and
 - 30 second actuation means for actuating the cutting blade between the open and closed positions.
2. The device of claim 1, further comprising a dissection tip disposed at the distal end of the first shaft for dissecting tissue.
3. The device of claim 1, wherein the first shaft is disposed at a proximal end to a handle.
4. The device of claim 1, wherein the clamp comprises a second shaft having a second internal lumen,

the second shaft being slidingly disposed in the first lumen.

5. The device of claim 4, wherein the second shaft has a second slot at the distal end, wherein the 5 second slot divides the clamping surface into two prongs.

6. The device of claim 5, wherein the cutting blade is slidingly disposed in the second internal lumen of the second shaft.

7. The device of claim 6, wherein the at least 10 one electrode comprises first and second electrodes, each of a different polarity.

8. The device of claim 7, wherein the first electrode comprises at least the clamping surface of the clamp and the second electrode comprises at least the 15 cutting edge of the cutting blade.

9. The device of claim 7, wherein the first electrode comprises at least the clamping surface of the clamp and at least the cutting edge of the cutting blade and the second electrode comprises at least a portion of 20 the first shaft.

10. The device of claim 9, wherein the at least a portion of the first shaft comprises an edge defining the first slot in the first shaft.

11. The device of claim 1, wherein the first actuation means comprises a button movably disposed in a handle and operatively connected to the clamp, wherein moving the button moves the clamp between the open and 5 closed positions.

12. The device of claim 1, wherein the second actuation means comprises a button movably disposed in a handle and operatively connected to the cutting blade, wherein moving the button moves the cutting blade between 10 the open and closed positions.

13. The device of claim 1, wherein the first and second actuation means comprises a button movably disposed in a handle and operatively connected to the clamp and cutting blade, wherein moving the button a first 15 predetermined amount moves the clamp between the open and closed positions and moving the button a second predetermined amount further moves the cutting blade between the open and closed positions.

14. The device of claim 1, wherein the tissue is 20 a side branch of a vessel being harvested.

15. A method for severing tissue, the method comprising:

providing a surgical device comprising; a shaft having an first internal lumen and a slot disposed at a 25 distal end; a clamp slidingly disposed in the slot between open and closed positions to capture tissue in the slot, the clamp having a clamping surface disposed at a distal

end; at least one electrode for applying RF energy to the tissue captured in the slot; a cutting blade slidingly disposed in the slot between open and closed positions, the cutting blade having a cutting edge to sever the tissue; 5 first actuation means for actuating the clamp between the open and closed positions; and second actuation means for actuating the cutting blade between the open and closed positions;

capturing tissue in the slot;
10 sliding the clamp in the slot to clamp the tissue in the slot;
applying RF energy to the at least one electrode to cauterize the tissue;
sliding the cutting blade in the slot to sever 15 the cauterized tissue.

16. The method of claim 15, wherein the tissue is a side branch of a vessel to be harvested.

17. The method of claim 16, further comprising dissecting tissue from the vessel to be harvested.

20 18. The method of claim 16, wherein the first actuation means comprises a button movably disposed in a handle and operatively connected to the clamp, the method further comprising moving the button to move the clamp between the open and closed positions.

25 19. The method of claim 16, wherein the second actuation means comprises a button movably disposed in a handle and operatively connected to the cutting blade, the

method further comprising moving the button to move the cutting blade between the open and closed positions.

20. The method of claim 16, wherein the first and second actuation means comprises a button movably disposed in a handle and operatively connected to the clamp and cutting blade, the method further comprising moving the button a first predetermined amount to move the clamp between the open and closed positions and moving the button a second predetermined amount to further move the cutting 10 blade between the open and closed positions.